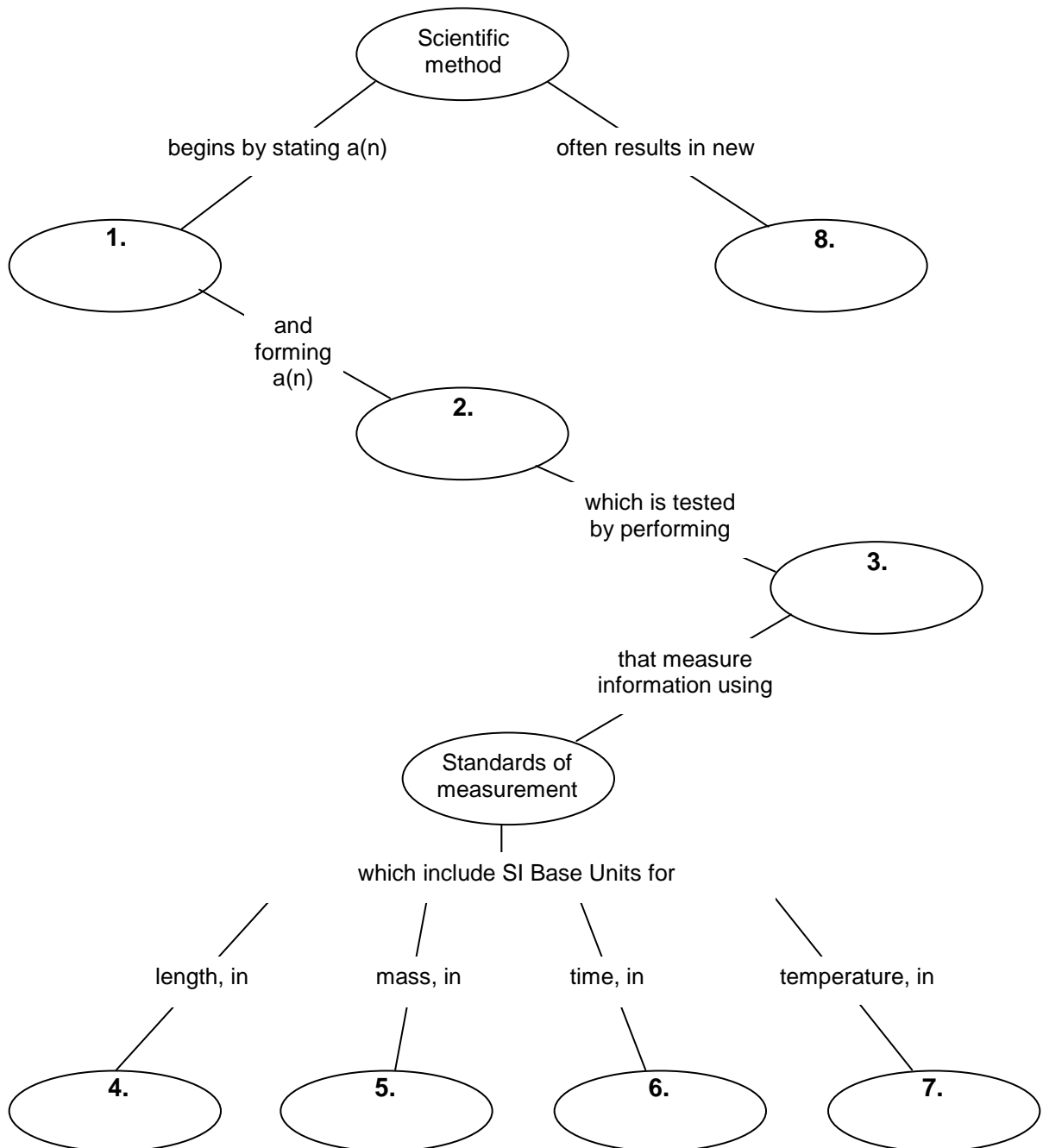


Directed Reading for **Overview** Content Mastery **The Nature of Science**

Directions: Complete the concept map using the following terms.

- hypothesis
- experiments
- Kelvin
- meters
- technology
- seconds
- problem
- grams

An organized set of procedures, or



Directed Reading for Content Mastery The Methods of Science Standards of Measurement

Directions: In each of the following statements, a term has been scrambled. Unscramble the term and write it on the line provided.

- _____ 1. An exact quantity that people agree to use for comparison is a *ndtsarda*.
- _____ 2. A process that uses observation and experimentation to gain knowledge is *nseccie*.
- _____ 3. An explanation based on many observations supported by experimental results is a *yethor*.
- _____ 4. A statement about what happens in nature that seems to be true all the time is a *scenicifit wal*.
- _____ 5. An educated guess using what you know and observe is a *pythoshise*.
- _____ 6. An idea, event, or object that represents something that is being explained is a *domel*.
- _____ 7. A hypothesis can be tested by conducting an *pexetrimne*.
- _____ 8. The solution is not obvious, and important information is missing in a *blepmor*.
- _____ 9. Different SI units are combined to obtain a *rvidede miu*.
- _____ 10. Mass per unit volume of material is *ndseyit*.
- _____ 11. A quantity that can have more than a single value is called a *lebirava*.
- _____ 12. Solving a problem involves finding missing *timrifonona*.
- _____ 13. SI is an abbreviation for *aiItonanerntl* System of Units.
- _____ 14. The amount of space occupied by a substance is its *lvuoem*.
- _____ 15. Absolute zero is zero on the *IKneiv lsace*.

Directed Reading for Content Mastery Communicating with Graphs Science and Technology

Directions: Choose the term from the word list that best completes each statement. Write the term in the blank at the left of each statement.

- | graph
vertical | y-axis
line | percentages
independent |
|-------------------|--|----------------------------|
| _____ | 1. A visual display of data or information is a _____. | |
| _____ | 2. In a line graph, the _____ axis is called the y-axis. | |
| _____ | 3. In a line graph, the dependent variable is plotted on the _____. | |
| _____ | 4. The type of graph that is useful for showing trends or continuous change is a _____. | |
| _____ | 5. Information in a circle graph is often shown as _____. | |
| _____ | 6. A variable that changes and affects the measure of another variable is called the _____ variable. | |

Directions: Match the terms in Column II with the descriptions in Column I. Write the letter of the correct term in the blank at the left.

Column I

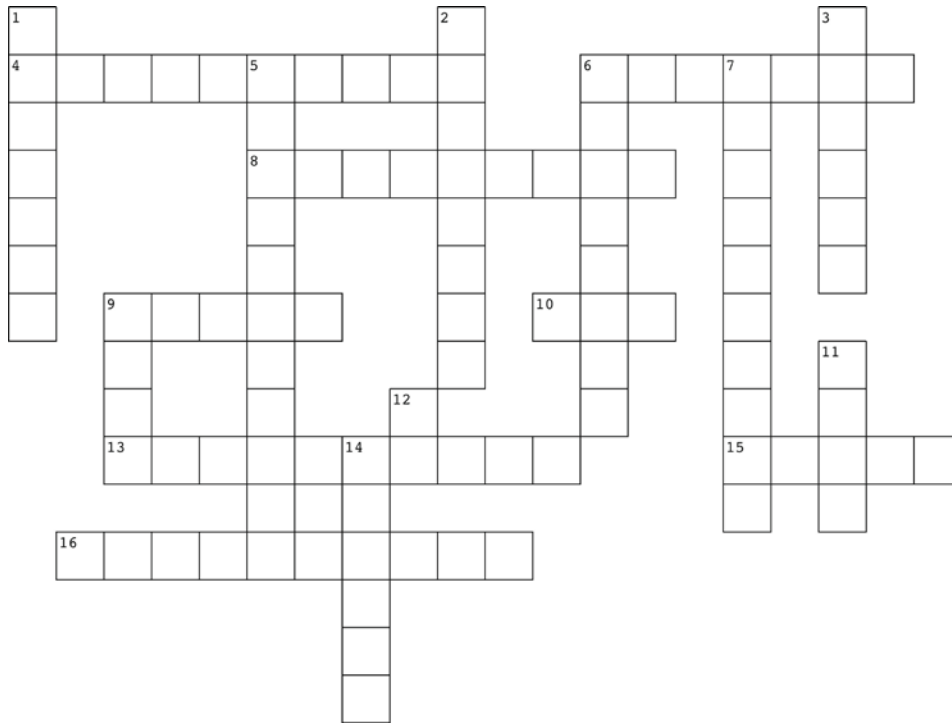
- _____ 7. require people to consider what is right and wrong
- _____ 8. the knowledge or skills to perform a task
- _____ 9. countries in which the basic needs for survival are met
- _____ 10. group of people that share similar values and beliefs
- _____ 11. a collection of objects, methods and procedures
- _____ 12. one source of funding for developing technologies

Column II

- a. society
- b. private industries
- c. technological system
- d. moral and ethical issues
- e. technology
- f. industrialized nations

Directed Reading for *Key Terms* Content Mastery The Nature of Science

Directions: Use the clues below to complete the crossword puzzle.



Across

4. Test of a hypothesis
6. The standard for comparison in an experiment
8. Factor that depends on the value of the other variable; _____ variable
9. Represents an idea or object
10. A statement of nature that seems to be true is a scientific _____.
13. An organized set of investigation procedures; _____ method
15. A visual display of data
16. An educated guess about the likely solution to a problem

Down

1. Mass per unit volume

2. An agreed-upon quantity used for comparison
3. The amount of space occupied by an object
5. Variable in an experiment that is adjusted by the experimenter; _____ variable
6. Factor that doesn't vary in an experiment
7. Applied science
9. The amount of matter in an object
11. Expectations change how results are viewed
12. Abbreviation for International System of Units
14. An explanation from observations and experiments